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Applicant:

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SPECIFICATION

1. Title of the Invention

Liquid Crystal Electro-Optical Device

2. Scope of Claims

(1) A liquid crystal electro-optical device in which a ferroelectric smectic liquid crystal is filled between two glass substrates having electrodes, and a polarizing plate is formed, the polarizing plate having mutually orthogonal polarization axes above and below the two glass substrates, the liquid crystal electro-optical device being characterized in that from among spacers existing between the two glass substrates, spacers formed in at least one side of two mutually parallel sides have a multi-layer structure in which a plurality of thin films being different from each other are alternately laminated, and a plurality of grooves parallel to the glass substrate surfaces are formed on an inner surface of the spacers, thereby making liquid crystal molecules orient in a predetermined direction.

(2) The liquid crystal electro-optical device according to claim 1, wherein a vertical orientation process is implemented on the inner surface of the spacers which are formed in a side that is orthogonal to a side whereon spacers having the plurality of grooves are formed.

(3) The liquid crystal electro-optical device according to claim 1 or 2, wherein